

picture him a dedicated and enterprising naturalist, a faithful and cheerful companion and a staunch and steady friend.

Lakatt's name has been commemorated in butterfly nomenclature by the Lycaenid *Jamides zebra lakatti* Corbet, 1940 (*Proc. R. ent. Soc. Lond.* (B) 9: 2). It is hoped shortly to give Pambu similar recognition.

LITTLE GADDESSEN HOUSE,

BERKHAMSTED, HERTS,

ENGLAND,

March 13, 1967.

Lt. Col. C. F. COWAN

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## 15. A CONTRIBUTION TO THE ROTATORIAN FAUNA OF SOUTH INDIA

(With two plates)

### INTRODUCTION

Present knowledge of the Rotatorian fauna of the Indian sub-continent is very scanty. Work on stray collections of Rotatoria by Anderson (1899), Murray (1906), Apstein (1907), Stewart (1908), Edmundson & Hutchinson (1934), Hauer (1936, 1937), Donner (1949, 1953), Brehm (1951) and Pasha (1961) have brought to light 161 species of Rotatoria from the Indian sub-continent and Tibet. Till now no one has undertaken a serious and intensive work on this group in India. Consequently several cosmopolitan species are not yet known from the sub-continent. An intensive study on the group is bound to be extremely rewarding.

The present paper lists 12 species, of which 8 are new records for the Indian sub-continent.

## MATERIAL AND METHODS

All the species recorded here were collected by the author from two fresh-water wells at Cuddapah and Chittoor and from temporary rain water puddles at Vijayawada. Samples of water were centrifuged to concentrate the rotifers. All the species treated here were studied in living condition and sketches of non-loricate species were drawn from live specimens. The sketches of loricate species were drawn after killing them in formaldehyde.

## SYSTEMATIC ENUMERATION

## Class MONOGONOTA

## Order PLOIMA

## Family BRACHIONIDAE

## Sub-Family BRACHIONINAE

*BRACHIONUS* Pallas***Brachionus calyciflorus* Pallas, 1776. (Plate I, Fig. 1)**

Yamamoto, 1960, p. 389, fig. 8; Sudzuki, 1964, p. 100, pl. 6, fig. 1.

*Material examined*: Single specimen from rain water puddle at Vijayawada on 26-5-63.

*Dimensions*: Lorica  $210\mu \times 150\mu$ .

*Remarks*: Recorded from Punjab and Kashmir from north India; new record for south India.

***Brachionus quadridentatus* Hermann, 1873. (Plate I, Fig. 2)**

Yamamoto, 1960, p. 371, fig. 9; Sudzuki, 1964, p. 103, pl. 9, fig. 9, 10.

*Material examined*: One specimen from ditch water at Vijayawada on 28-5-63.

*Dimensions*: Lorica  $185\mu \times 150\mu$ .

*Remarks*: New record for the Indian sub-continent.

***Brachionus urceolaris* var. *urawensis* Sudzuki, 1964. (Plate I, Fig. 3).**

*Material examined*: Three specimens from a temporary rain water puddle at Vijayawada on 16-5-63.

*Dimensions*: Lorica  $210-241\mu \times 150-180\mu$ .

*Remarks*: New to the Indian sub-continent. Known only from Japan till now (Sudzuki, 1964).

***Brachionus* sp. (Plate I, Fig. 4)**

*Material examined*: Two specimens from ditch water at Vijayawada on 26-5-63.

*Dimensions* : Lorica 165-175 $\mu$   $\times$  140-145 $\mu$ .

*Remarks* : This form does not agree with known species of *Brachionus*. Possibly a new species but more specimens of this form will have to be studied before assigning to it the status of a new species.

*MACROCHAETUS* Perty

**Macrochaetus subquadratus** (Perty, 1850), (Plate II, Fig. 5)

Gillard, 1952, p. 329, fig. 3 ; Edmundson, 1959, p. 450, figs. 18-25 (a).

*Material examined* : Several specimens among filamentous algae of fresh-water at Cuddapah on 6-12-58.

*Dimensions* : Lorica 74 $\mu$   $\times$  81 $\mu$ .

*Remarks* : New record for the Indian sub-continent.

Sub-Family COLURINAE

*LAPADELLA* Bory de St. Vincent.

**Lapadella dactyliseta** (Stenroos) (Plate II, Fig. 6)

Hauer, 1935, pp. 87-88, fig. 19.

*Material examined* : Several specimens among algae of an old well at Chittoor in August 1964.

*Dimensions* : Lorica 83-90 $\mu$   $\times$  55-60 $\mu$ .

*Remarks* : New record for the Indian sub-continent.

**Lapadella similis** Lucks. (Plate II, Fig. 7)

Hauer, 1935, p. 144, pl. I, fig. 5.

*Material examined* : Several specimens among filamentous algae of an unused well at Cuddapah on 9-9-61.

*Dimensions* : Lorica 96-100 $\mu$   $\times$  65-67 $\mu$ .

*Remarks* : New record for the Indian sub-continent.

Family LECANIDAE

*LECAE* Nitzsch.

**Lecane papuana** (Murray). (Plate II, Fig. 8)

Pasha, 1961, p. 50-51, fig. 1, 2.

*Material examined* : Several specimens among filamentous algae from a well at Cuddapah on 22-1-61.

*Dimensions* : Lorica 138-150 $\mu$   $\times$  108-113 $\mu$ .

*Remarks* : Recorded from Madras (S. India) ; Punjab (N. India)

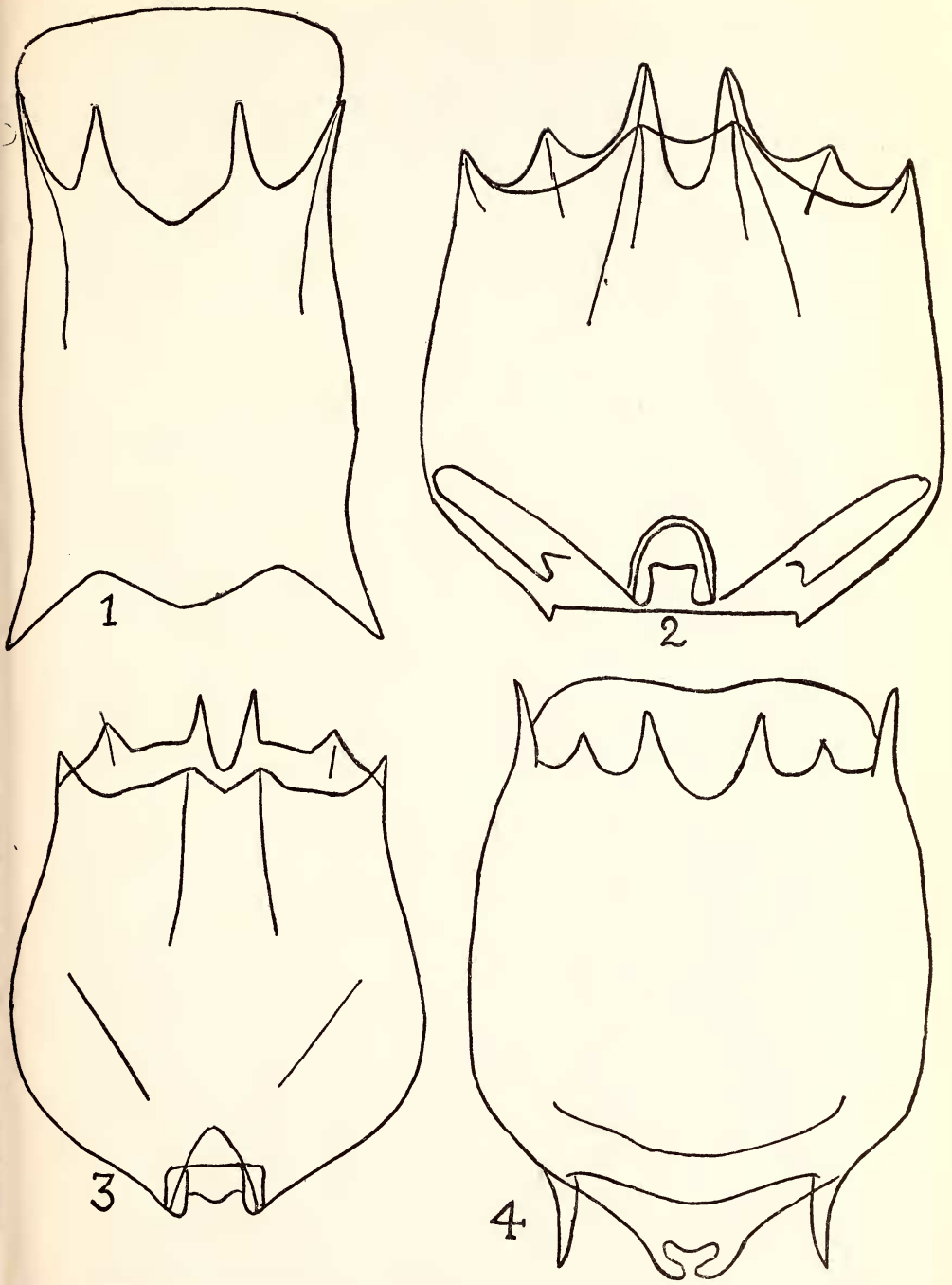


Fig. 1. *Brachionus calyciflorus*  $\times$  c. 338; Fig. 2. *B. quadridentatus*  $\times$  c. 414; Fig. 3. *B. urceolaris* var. *urawensis*  $\times$  c. 326; Fig. 4. *Brachionus* sp.  $\times$  c. 720.

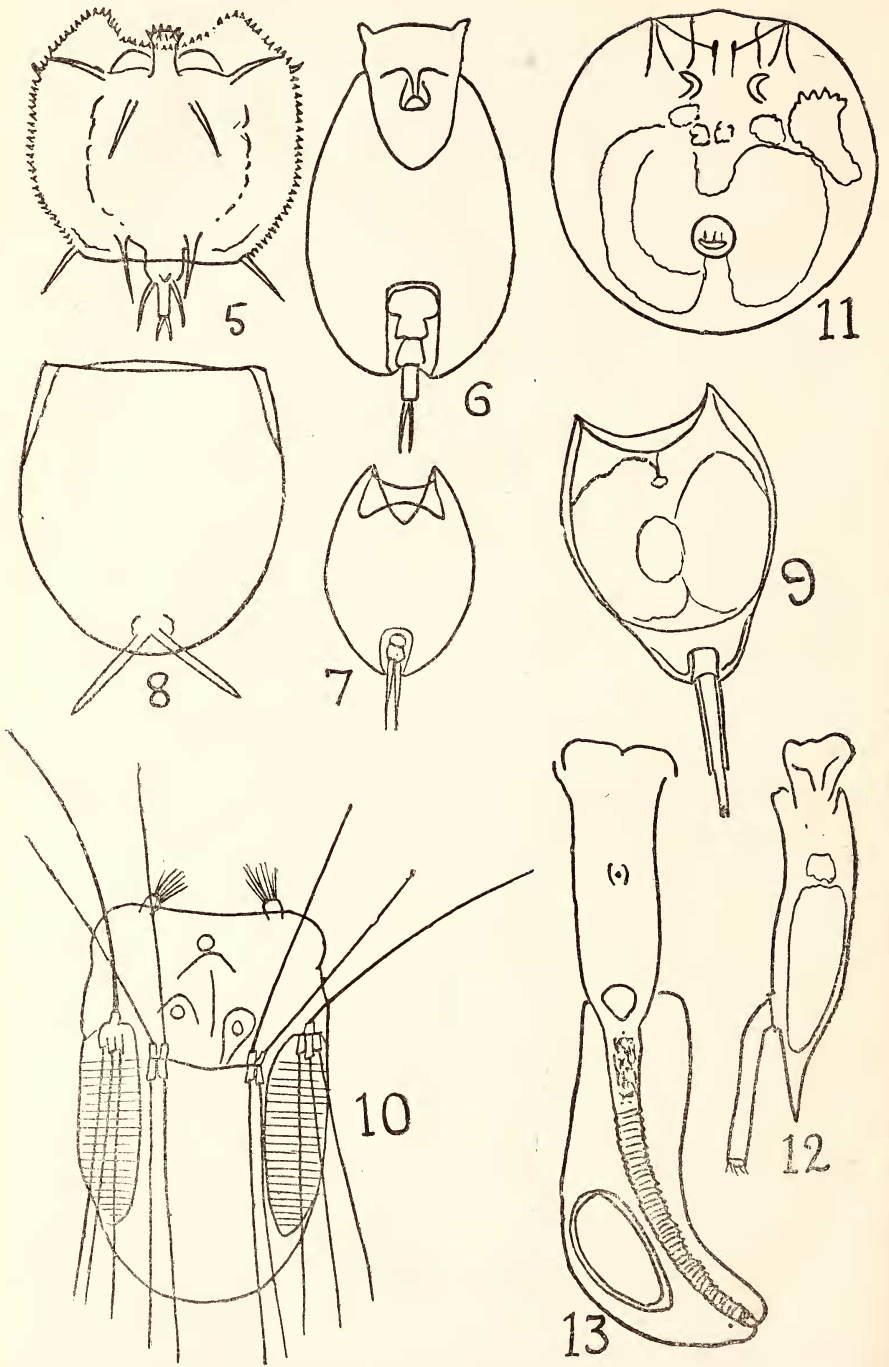


Fig. 5. *Macrochaetus subquadratus*  $\times$  c. 400; Fig. 6. *Lapadella dactyliseta*  $\times$  c. 426; Fig. 7. *L. similis*  $\times$  c. 306; Fig. 8. *Lecane papuana*  $\times$  c. 296; Fig. 9. *Monostyla lunaris*  $\times$  c. 289; Fig. 10. *Polyarthra longiremis*  $\times$  c. 355; Fig. 11. *Testudinella patina*  $\times$  c. 355; Fig. 12. *T. patina*  $\times$  c. 222; Fig. 13. *Ptygura* sp.  $\times$  c. 231.